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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/511,992 | 10/21/2004 | Dale L Handlin | TH1768E/US | 8403 |

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| EXAMINER | |
|---|---|
| ASINOVSKY, OLGA | |
| **ART UNIT** | **PAPER NUMBER** |
| 1711 | |

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/511,992 | HANDLIN ET AL. | |
| | Examiner | Art Unit | |
| | Olga Asinovsky | 1711 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *21 October 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *17-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. Claims 26-28 and 29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

2. Claims 26-28 provide for the use of the solvent-free, hot melt adhesive for bonding a polar leather layer to a non-polar substrate, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 26-28 are is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd.* v. *Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966). In claim 29, a process for bonding a polar leather layer to a non-polar substrate is not clear, because there are no steps of process conditions, the step "by using the solvent-free, hot melt adhesive composition" is not clear and makes a process indefinite.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 17-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Trepka et al U.S. Patent 6,265,485 in view of Knoll et al U.S.Patent 6,197,889 and further in view of Himes U. S. Patent 5,750,622.

Trepka' 485 discloses block copolymer having variety of block structures produced by a variety of monomer addition sequences and a variety of coupling agents, col. 1, lines 33-36, for the present claims 1 and 17. The block copolymer having general structure S2-B1/S3-Li is readable in applicants' claims, wherein block S2 is formed from monovinylaromatic monomer and B1/S3 is a soft block copolymer of a conjugated diene monomer and styrene. The copolymer block B/S is readable in applicants' claims for being a block B. The randomizer has been used in the polymerization of the monovinylaromatic monomer and the conjugated diene in a mixed monomer charge, col. 7, lines 3-5. The randomizer can be selected to manipulate the direction of the conjugated diene rich chain to monovinylaromatic chain, col. 7, lines 5-17. The randomizer is a controlling agent for producing the desired controlled distribution block copolymer of a block B/S, for the present claims, wherein the randomizer regulates tapering or random polymerization of the monovinylaromatic monomer and the conjugated diene in a mixed monomer charge, col. 7, lines 3-5. Although, Trepka does not name "controlled distribution copolymer block B", however the disclosure is teaching the same meaning that "the taper can be either a graduation from conjugated diene rich chain to monovinylaromatic rich chain or a graduation from a monovinylaromatic rich

chain to conjugated diene rich chain according to which monomer enters the chain faster," col. 7. lines 7-17. Therefore, applicants' limitation (a)(i) and (a)(iii) would be reasonably met in Trepka'485 invention. The resinous copolymeric product is in a solid stage, col. 11, lines 8-9 and col. 12, lines 3-5. The resinous copolymer product can be blended with other polymers and/or additives to develop the desired combination of physical properties, col. 13, line 45 through col. 14-63.

Trepka'485 does not disclose an average molecular weight for each A-block and each B-block copolymer for the limitation (a)(ii) in the present claim 17.

Knoll'889 discloses a block copolymer having hard phase formed from polystyrene block-A having a molecular weight preferably from 3000 to 80,000 and a soft phase B/A block copolymer formed from a diene and vinylaromatic monomers, wherein a soft phase block has a molecular weight preferably from 5000 to 150,000, col. 6, lines 65-67 and col. 7, lines 1-3, for the present limitation in claim 1(a)(ii). The order of the monomer addition depends on the chosen block structure, col. 8, lines 8-25.

Knoll and Trepka disclose the analogous anionic polymerization process for producing a block copolymer. It would have been obvious to one of ordinary skill in the art to consider that a block copolymer in Trepka' 485 can have a molecular weight for a hard block and a soft block as disclosed by Knoll'889, because both references disclose the analogous anionic polymerization process for making a block copolymer comprising the analogous structure and the same ingredients.

Trepka' 485 does not disclose a hydrogenated hydrocarbon tackifying resin (b) and a resin (c) which is compatible with the monoalkenyl arene blocks for the specified

limitations in the present claim 17(b) and (c). However, the additives and/or addition resin can be blended with the resulting block copolymer in Trepka'485, col. 13, lines 45-67 and col. 14, lines 1-67. Also, Trepka'485 does not disclose using the block copolymer for a hot melt adhesive utility.

Himes discloses a hot melt adhesive composition comprising an elastomeric vinyl aromatic hydrocarbon/conjugated diene block copolymer and a tackifying resin such as a hydrogenated rosin and a resin which is compatible with the polymer block on the end of the block copolymer, col. 2, lines 17-48 and col. 7, lines 18-60. The tackifying resin such as a hydrogenated rosin, col. 7, line 29 is readable for being a component 17(b) in the present claims 17 and 23.The resin which is compatible with styrene block includes coumarone-indene resins, poly alpha methyl styrene, polystyrene resin, vinyl toluene-alpha-methyl styrene copolymer, col. 7, lines 39-51, for the present claim s 17(c) and claim 25. The hydrogenated rosin and a resin compatible with a styrene end of the block copolymer are readable in applicants' claims.

It would have been obvious to one of ordinary skill in the art to use the block copolymer composition in Trepka invention as a hot melt adhesive and to modify said block copolymer by employing a tackifying resin and a compatible resin as teaching by Himes invention, because said tackifying resin and a compatible resin have a benefit for improving the adhesive properties, and since the addition ingredients are depending on the desired characteristics and intended use of said block copolymer in Trepka invention.

There is no applicants' Form 1449 with references.

***Specification***

5. The abstract of the disclosure is objected to because undue length (more than 150 words). Correction is required. See MPEP § 608.01(b).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is 571-272-1066. The examiner can normally be reached on 9:00 to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Olga Asinovsky
Examiner
Art Unit 1711

O.A..
October 02, 2005

James J. Seidleck
Supervisory Patent Examiner
Technology Center 1700